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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/595,028 | 05/15/2007 | **Klaus Seelbach** | 71533-0031 | 1477 |

20915 7590 03/25/2008

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| EXAMINER | |
|---|---|
| GIMIE, MAHMOUD | |
| **ART UNIT** | **PAPER NUMBER** |
| 3747 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 03/25/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/595,028 | SEELBACH, KLAUS | |
| | Examiner | Art Unit | |
| | Mahmoud Gimie | 3747 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *15 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102 (b) as being anticipated by Streicher ET al. (US 6,059,203).

Streicher discloses a control valve module (41) for a fuel injector assembly for an internal combustion engine, the fuel injector assembly having a pump body (11) with a high-pressure passage , and a spring cage assembly (10) , with a high-pressure passage, wherein the control valve module (41), is adapted to be interposed between the pump body (11), with an upper edge, facing the pump body (11) and a lower edge: facing the spring cage assembly (10), and wherein the control valve module (41) further has a facing recess (not numbered, see figures 1 and 2) to accommodate at least a portion of a stator assembly (40) , with a cylindrical chamber (50), extending into the valve module (41) from the facing recess, with an annulus (48) surrounding the cylindrical chamber (50), and with a high-pressure passage (17), characterized by: the control valve high-pressure passage (17) having a first portion (upper portion) extending linearly between the annulus (48), and the upper edge , where it is positioned to communicate with the pump body (11, figure 1) high-pressure passage, and a second portion (lower portion) , extending linearly between the annulus (48) ,and the lower edge

where it is positioned to communicate with the spring cage (10) assembly high-pressure passage.

Regarding claim 2, wherein the first portion and second portion extend relative to each

Regarding claim 3, wherein the pump body (11) is provided with a recess to accommodate at least portion of the stator assembly (40) so that the recess and the facing recess fully enclose and retain the stator assembly when the control valve module (41) is assembled to the pump body.

Regarding claim 4, Streicher discloses a fuel injector assembly for an internal combustion engine, the fuel injector assembly having a pump body (11) with a high-pressure passage, a spring cage assembly (10) with a high-pressure passage, and a control valve module (41) ,between the pump body (11),and the spring cage assembly (10), with an upper edge facing the pump body (11) and a lower edge facing the spring cage assembly (10), and wherein the control valve module (41) has a facing recess to accommodate at least a portion of a stator assembly (40) with a cylindrical chamber, extending into the valve module, from the facing recess, with an annulus (48) surrounding the cylindrical chamber (50), and with a high-pressure passage, characterized by: the control valve high-pressure passage (17) , having a first portion (upper portion) extending linearly between the annulus(48) and the upper edge where it is positioned to communicate with the pump body (11) high-pressure passage, and a second portion extending linearly between the annulus and the lower edge, where it is positioned to communicate with the spring cage assembly (10) high-pressure passage.

Regarding claim 5, wherein the pump body, has a recess to accommodate at least portion of the stator assembly (40) so that the recess and the facing recess fully enclose and retain the stator assembly

Regarding claim 6, wherein the first portion and second portion extend relative to each other at an angle other than 180 degrees.

**3. Claim 7 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Streicher et al. (US 6,059,203).**

Streicher discloses a method of making a control valve module (41) for a fuel injector assembly for an internal combustion engine comprising the steps of: providing a metal block with a machined (col. 3 and ll. 17-67) upper edge ,and machined lower edge; machining a facing recess , into the upper edge , with a cylindrical chamber extending therefrom; drilling a first portion of a conduit from the upper edge, to an intersection point at the cylindrical chamber; drilling a second portion of a conduit from the lower edge to the intersection point; and electro chemically machining an annulus surrounding the cylindrical chamber the intersection point.

The claim is a product-by-process claim and the product itself does not depend on the process or method for making it. Streicher teaches that the control valve assembly (41) is machined. The drilling is inherently and necessarily is used to provide the necessary piping arrangement for the control valve assembly.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references disclose fuel injectors with electrically energized control valve assembly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Gimie whose telephone number is 571-272-4841. The examiner can normally be reached on Monday-Friday between 7 a.m. -3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on 571-272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MG/
/Mahmoud Gimie/
Primary Examiner, Art Unit 3747